

**DYNAMIC, AUTOMATED DOUBLE-ENDED SYSTEM AND METHOD FOR
TESTING AND QUALIFYING METALLIC TELECOMMUNICATION LOOPS**

ABSTRACT

5 A multi-unit test system performs automated and
dynamically alterable, double-ended testing of
telephone lines, whose service is provided on copper
cable pairs. A prescribed set of (e.g., twelve)
individual tests are executed either from a hand-held
10 measurement unit, or by a central office-resident
direct access test unit, or by a collaboration of the
two. The hand-held measurement unit and the direct
access test unit exchange FSK-based test control
messages with one another that are effective to cause a
15 selected electrical condition to be applied to a first
portion of the wireline and to cause a prescribed
electrical measurement to be made at a second portion
of the wireline.